

IN THE CLAIMS

Kindly amend claims 1, 3-8 and 13 as shown in the following claim listing:

1. (currently amended) A method for the heating of magnetic particles which are present in a target region, which method includes the steps of
 - a) generating a magnetic field whose magnetic field strength varies in space in such a manner that a first sub-region (301) having a low magnetic field strength and a second sub-region (302) having a higher magnetic field strength are formed in the target region,
 - b) changing the position in space of the two sub-regions in the target region in a nonrotational manner for so long and with such a frequency that the target region is heated.
2. (original) A method as claimed in claim 1, in which a spatially and temporally variable magnetic field is generated in order to change the position in space of the two sub-regions in the target region.
3. (currently amended) ~~The use of~~ A method as claimed in claim 1,
further comprising providing said magnetic particles as monodomain

particles of a ferromagnetic material or a ferrimagnetic material
~~in a method as claimed in claim 1.~~

4. (currently amended) ~~The use of~~ A method as claimed in claim 1,
further comprising providing said magnetic particles as multidomain
particles of a ferromagnetic material or a ferrimagnetic material
~~in a method as claimed in claim 1.~~

5. (currently amended) ~~The use of~~ A method as claimed in claim 4,
further comprising providing substrates which have dimensions in
the μm range and ~~are provided with~~ providing a layer of a
ferromagnetic soft material which is thin in comparison with said
dimensions as multidomain particles on said substrates ~~as claimed~~
~~in claim 4.~~

6. (currently amended) ~~The use of the particles claimed in claim~~
~~3~~ A method as claimed in claim 3, further comprising providing said
monodomain particles in a colloidal dispersion.

7. (currently amended) ~~The use of~~ A method as claimed in claim 1,
further comprising enclosing particles ~~enclosed by~~ in a molecular
envelope for tissue-specific concentration ~~in a method as claimed~~
~~in claim 1.~~

8. (currently amended) ~~The use of particles in a~~ A method as claimed in claim 1, ~~where the Curie temperature of the particles corresponds to~~ further comprising heating the particles such that the temperature prevailing in the target region after the desired heating or ~~corresponds to~~ the a maximum permissible temperature in the target region corresponds to the Curic temperature.

9. (original) An arrangement for carrying out the method claimed in claim 1, which arrangement includes

- a) means for generating a magnetic field whose magnetic field strength varies in space in such a manner that a first sub-region (301) having a low magnetic field strength and a second sub-region (302) having a higher magnetic field strength are formed in the target region,
- b) means for changing the position in space of the two sub-regions in the target region for so long and at such a frequency that the target region is heated.

10. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field include a permanent magnet arrangement for generating a magnetic gradient field whose

direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.

11. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field including a gradient coil system for generating a magnetic gradient field whose direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.

12. (original) An arrangement as claimed in claim 9, comprising means for generating a magnetic field which is superposed on the magnetic gradient field and which varies in time in order to shift the two sub-regions in the target region.

13. (currently amended) An arrangement as claimed in claim 9, comprising means for generating a first magnetic field and at least two further magnetic fields which are superposed on the magnetic gradient field, the first magnetic field being variable more rapidly in time and with a ~~low~~ lower amplitude whereas the two further magnetic fields are variable more slowly in time and with a ~~high~~ higher amplitude.

14. (original) An arrangement as claimed in claim 13, in which the three magnetic fields extend essentially perpendicularly to one another in the target region.